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EXAMINER

CHOKSHI, PINKAL R

ART UNIT

PAPER NUMBER

2425

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/506,910

Applicant(s)

COTARMANACH, ALEXANDRE

Examiner

PINKAL CHOKSHI

Art Unit

2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 10/10/2008

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 10/10/2008 with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. See the new rejection below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-21** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Regarding claims 1, and 17-20, it is unclear when claiming "...pointer is a dependency pointer of length depLength..." It is ambiguous what the

Applicant means by dependency pointer of length depLength. Applicant is asked to clarify. For the purpose of examination, it is the Examiner's position that any distance reads on above limitation and such is in accordance with broadest reasonable interpretation, and from the perspective of one having ordinary skill in the art.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2001/0027468 A1 to Okura ET al (hereafter referenced as Okura) in view of US Patent 6,205,140 B1 to Putzolu ET al (hereafter referenced as Putzolu).

Regarding **claim 1**, "transmission procedure of at least one data stream to at least one terminal" reads on the transmission system that transmits streams to reception device (§10008) disclosed by Okura and represented in Fig. 1. As to "each of said stream or streams being made of stream units" Okura discloses (§10111) that the check unit determines based on the streams received from decoder whether a packet has been received as represented in Fig. 5. As to "wherein at least some of said stream units include at least one pointer that points to at least one stream unit of said stream or of another stream that may

have been received previously in the terminal, called a required previous unit"

Okura discloses (§0125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§0029) that when the scene does not have a successive sequence number, system determines that there is an abnormality. As to "the processing of said stream unit is not performed in said terminal if the required previous unit or units have not been received" Okura discloses (§0024) that control unit, based on the scene description information, determines whether to process the stream. Okura further discloses (§0129) that the system determines if the data is missing, and then it reads data from storage portion. Okura further discloses (§0010, §0029, and §0113) that program file is not allowed to have data missing and it must be fully received by receiving side. If the check unit determines that sequence numbers are not in order then it means a packet is missing.

Okura meets all the limitations of the claim except "stream units include at least one pointer that points to previously received stream unit." However, Putzolu discloses (col.2, lines 63-67) that an arrow (pointer) is directed from the first packet to a second packet indicates that the first packet depends on the second packet, so that the second packet is required for the first packet to process as represented in Fig. 1. As to "wherein said pointer is a dependency pointer of length depLength, the dependency pointer being included in a dependency descriptor of said stream unit, said dependency descriptor

describing said dependency pointer” Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu further discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to have a pointer in the stream unit, instead of sequence number, to point to the previous required stream unit as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Regarding **claim 2**, “transmission procedure wherein the procedure includes the transmission of at least two data streams that are transmitted independently” Putzolu discloses (col.3, lines 1-13) that the multiple independent streams are received in the receiver as represented in Fig. 1 (elements 10, 50, 70).

As to “one stream unit of a first stream pointing to at least one required previous unit of at least a second stream, in which said stream unit of the first

stream includes enrichment data of the data contained in the second stream(s)" Putzolu discloses (col.2, line 63-col.3, line 13) that an arrow (pointer) is directed from the first packet to a second packet indicates that the first packet depends on the second packet, so that the second packet is required for the first packet to process as represented in Fig. 1. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 3**, "transmission procedure wherein said data streams correspond to different hierarchical levels of hierarchical encoding, the processing of a stream unit of a given hierarchical level is only performed if the stream units of the corresponding lower hierarchical levels have been received" Putzolu discloses (col.5, lines 4-8, 40-44) that the media streams have a value where it's matched with a layer of an hierarchically encoded video stream which requires based layer media stream in order to be successfully delivered. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 4**, "transmission procedure wherein this stream unit points to at least one previous unit defining a sequence of required previous units" Putzolu discloses (col.4, lines 45-48; col.10, lines 42-46) that the packet includes the sequence numbers indicating previous data packets. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 5**, "transmission procedure wherein at least one of said pointers allows recovering at least one required previous unit that includes the data allowing decoding and/or decrypting of the considered stream unit" Okura discloses (§0123) that the multiplexer outputs streams to decoder which decodes the packet.

Regarding **claim 6**, "transmission procedure wherein said required previous unit or units include data that allows a terminal to decide whether the data of a considered stream unit must be decoded and/or decrypted, and then displayed after decoding" Putzolu discloses (col.2, lines 1-7, 27-32) that the system will allow all clients to receive decoded base level streams in real time to display. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 7**, "transmission procedure wherein at least one of said pointers point to data that can be known by said terminal, so that the latter can decide on its capacity or incapacity to process the corresponding stream unit" Okura discloses (§0026) that the transmission system that transmits control information pointing the object data and scene information with each other, where process portion unit determines whether to use the default scene information to modify corresponding stream information for output.

Regarding **claim 8**, "transmission procedure wherein at least one of said stream units includes at least one pointer pointing to at least one stream unit of said stream or another stream that may be subsequently received" Okura discloses (§10125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§10029) that when the scene does not have a subsequent sequence number, system determines that there is an abnormality.

Regarding **claim 9**, "transmission procedure wherein said stream unit or units that can be subsequently received posses a marker that allows linking with said pointer(s)" Okura discloses (§10164) that the data packet in transmission system has a time stamp information and based on this information, a correspondence between video, audio and other data are uniquely determined.

Regarding **claim 10**, "transmission procedure wherein the pointers of at least two similar stream units transmitted at distinct times point to the same stream unit that can be subsequently received" Okura discloses (§10008) that the multiple streams are transmitted via different routes and protocols to receiving device.

Regarding **claim 11**, "transmission procedure wherein the procedure implements an indicator that specifies the role of the pointer(s) from among two

of the roles belonging to the groups that include: Designation of at least one previous stream unit that must be decoded to allow taking into account the considered stream unit" Okura discloses (§0151) that the checking portion uses the data as well as previous data associated with the stream from the storage portions to generate this data to decoder which decodes it and then displayed on device.

As to "designation of at least one previous stream unit that includes the data necessary for decoding and/or decrypting the considered stream unit, and/or of a reference to a status of the protection system" Okura discloses (§0123) that the multiplexer outputs all streams to decoder which decodes the packet.

As to "designation of at least one subsequent stream unit" Okura discloses (§0125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§0029) that when the scene does not have a subsequent sequence number, system determines that there is an abnormality.

Regarding **claim 12**, "transmission procedure wherein at least some of said stream units include a dependency descriptor, which defines said role" Okura discloses (§0006) that the scene description and streams are associated with each other by an object descriptor to control information.

Regarding **claim 13**, "transmission procedure wherein at least some of said stream units include a dependency marker that allows its identification as a required previous unit" Okura discloses (§0120) that based on the ID assigned to the stream, it identifies and refers data related to the stream.

Regarding **claim 14**, "transmission procedure wherein at least some of said stream units include an identification marker of said stream unit in said stream" Okura discloses (§0119 and §0120) that the elementary stream, that transmits from transmission system to reception system, is assigned an identification to identify the stream.

Regarding **claim 15**, "transmission procedure wherein the procedure is implemented at the synchronization level so that no previous processing of a received stream unit is necessary" Okura discloses (§0156) that the data stream and the related data stream are synchronized with each other based on the time stamp.

Regarding **claim 16**, "a stream of data transmitted according to the transmission procedure" Okura discloses (§0007) that the stream of data is delivered from a transmitting side to receiving side.

Regarding **claim 17**, "a method comprising: producing a stream of data and transmitting the stream to the at least one terminal" reads on the transmission system that transmits streams to reception device (§0008) disclosed by Okura and represented in Fig. 1. As to "wherein the stream is made of stream units transmitted independently one from the other" Okura discloses (§0111) that the check unit determines based on the streams received from decoder whether a packet has been received as represented in Fig. 5. As to "wherein at least some of said stream units include at least one pointer that points to at least one stream unit of said stream or another stream that may have been received previously in a terminal, called a required previous unit" Okura discloses (§0125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§0029) that when the scene does not have a successive sequence number, system determines that there is an abnormality. As to "the processing of said stream unit is not performed in said terminal if the required previous unit has not been received" Okura discloses (§0024) that control unit, based on the scene description information, determines whether to process the stream. Okura further discloses (§0129) that the system determines if the data is missing, and then it reads data from storage portion. Okura further discloses (§0010, §0029, and §0113) that program file is not allowed to have data missing and it must be fully received by receiving side. If the check unit determines that sequence numbers are not in order then it means a packet is missing.

Okura meets all the limitations of the claim except "stream units include at least one pointer that points to previously received stream unit." However, Putzolu discloses (col.2, lines 63-67) that an arrow (pointer) is directed from the first packet to a second packet indicates that the first packet depends on the second packet, so that the second packet is required for the first packet to process as represented in Fig. 1. As to "wherein said pointer is a dependency pointer of length depLength, the dependency pointer being included in a dependency descriptor of said stream unit, said dependency descriptor describing said dependency pointer" Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu further discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to have a pointer in the stream unit, instead of sequence number, to point to the previous required stream unit as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Regarding **claim 18**, “a server for data designed to be transmitted to at least one terminal” reads on the transmission system that transmits streams to reception device (§0008) disclosed by Okura and represented in Fig. 1. As to “the form of at least one data stream made of stream units transmitted independently from each other” Okura discloses (§0111) that the check unit determines based on the streams received from decoder whether a packet has been received as represented in Fig. 5. As to “wherein at least some of said stream units include at least one pointer that points to at least one stream unit of said stream or another stream that may have been received previously in a terminal, called a required previous unit” Okura discloses (§0125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§0029) that when the scene does not have a successive sequence number, system determines that there is an abnormality.

Okura meets all the limitations of the claim except “stream units include at least one pointer that points to previously received stream unit.” However, Putzolu discloses (col.2, lines 63-67) that an arrow (pointer) is directed from the first packet to a second packet indicates that the first packet depends on the second packet, so that the second packet is required for the first packet to process as represented in Fig. 1. As to “wherein said pointer is a dependency pointer of length depLength, the dependency pointer being included in a

dependency descriptor of said stream unit, said dependency descriptor describing said dependency pointer" Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu further discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to have a pointer in the stream unit, instead of sequence number, to point to the previous required stream unit as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Regarding **claim 19**, "a terminal that can receive at least one data stream" reads on the transmission system that transmits streams to reception device (§0008) disclosed by Okura and represented in Fig. 1. As to "data stream made of stream units transmitted independently from each other" Okura discloses (§0111) that the check unit determines based on the streams received from decoder whether a packet has been received as represented in Fig. 5. As to

"wherein at least some of said stream units include at least one pointer that points to at least one stream unit of said stream or another stream that may have been received previously in a terminal, called a required previous unit" Okura discloses (§10125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§10029) that when the scene does not have a successive sequence number, system determines that there is an abnormality.

Okura meets all the limitations of the claim except "stream units include at least one pointer that points to previously received stream unit." However, Putzolu discloses (col.2, lines 63-67) that an arrow (pointer) is directed from the first packet to a second packet indicates that the first packet depends on the second packet, so that the second packet is required for the first packet to process as represented in Fig. 1. As to "wherein said pointer is a dependency pointer of length depLength, the dependency pointer being included in a dependency descriptor of said stream unit, said dependency descriptor describing said dependency pointer" Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu further discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media

streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to have a pointer in the stream unit, instead of sequence number, to point to the previous required stream unit as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Regarding **claim 20**, "a reception procedure comprising receiving at least one data stream made of stream units, transmitted independently from each other" reads on the transmission system that transmits streams to reception device (§0008) disclosed by Okura and represented in Fig. 1. Okura further discloses (§0111) that the check unit determines based on the streams received from decoder whether a packet has been received as represented in Fig. 5. As to "wherein at least some of these stream units include at least one pointer that points to at least one stream unit of said stream or another stream that may have been received previously in a terminal, called required previous unit" Okura discloses (§0125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§0029) that when the scene does not have a successive sequence number, system determines that there is an abnormality.

Okura meets all the limitations of the claim except "stream units include at least one pointer that points to previously received stream unit." However, Putzolu discloses (col.2, lines 63-67) that an arrow (pointer) is directed from the first packet to a second packet indicates that the first packet depends on the second packet, so that the second packet is required for the first packet to process as represented in Fig. 1. As to "wherein said pointer is a dependency pointer of length depLength, the dependency pointer being included in a dependency descriptor of said stream unit, said dependency descriptor describing said dependency pointer" Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu further discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to have a pointer in the stream unit, instead of sequence number, to point to the previous required stream unit as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Regarding **claim 21**, "reception procedure wherein at least one of said pointers points to at least one stream unit of said stream or another stream that may have been received previously in a terminal, called required previous unit" Okura discloses (§10125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§10029) that when the scene does not have a successive sequence number, system determines that there is an abnormality.

As to "it includes the following stages: analysing said pointer(s) of a stream unit and processing said stream unit if the required previous unit or units are received" Okura discloses (§10023) that the control system analyzes and resolves the error which controls the process portion to scene information to resolve the error and process the streams.

7. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Okura in view of Putzolu as applied to claims 1-21 above, and further in view of US Patent 6,606,329 B1 to Herrmann ET al (hereafter referenced as Herrmann).

Regarding **claim 22**, "the transmission procedure comprising a step of using said transmission procedure in one of the applications belonging to the group consisting of: systematic broadcasting of a message before accessing a program selected by the user" Okura discloses (§10068) that the transmission

system such as head-end provides audio/video programs to user at reception device as represented in Fig. 1 (elements 10, 20).

Combination of Okura and Putzolu meets all the limitations of the claim except "conditional access at a specific quality level and/or at a specific option of a program and interactive television." However, Herrmann discloses (col.1, line 61-col.2, line 6) that the TransMux layer includes a protection and a multiplexing sublayer which communicates with network or storage device to deliver requested quality level. Herrmann further discloses (col.1, lines 29-32) that user interacts with the television after the audio/video data has been processed as represented in Fig. 2. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to provide the quality level of a program as taught by Herrmann so the user can interact with television to receive detailed information about the program that he/she is viewing.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425